



NO SCALE

Notes to the Designer

Updated September 2021
MGS W-Beam Guardrail Long-Span System

General Information

- All graphics and text will be in the sheet model.

- **Appropriate Applications.**

Long-span guardrail systems are used to span low-fill culverts. This drawing may also be used if an impenetrable object is encountered at post locations during construction.

Crash Test Criteria	MASH
Test Level	TL-3
FHWA Eligibility Letter	B-189, B-133, B-211A
TF 13 Designator	SGR20a-b, SGR38a-e
Crash Test Report	MwRSF Report No TRP-03-187-07



From MwRSF website
<https://mwrsf.unl.edu/mgs.php>

- **Limitations.**

The maximum span is 25 feet.

- **Layout Guidance.**

See AASHTO *Roadside Design Guide* Section 5.4.2

See the FLH *Midwest Guardrail System FAQ* document for more information.

Applicable SCRs

- Section 563 (if weathering agent applied to galvanized elements)
- Section 617
- Section 710
- Section 725 (if weathering agent applied to galvanized elements)

Typical Pay Item Used

- 61701-4550 Guardrail system MGS, type 2, class A wood posts [LNFT] for galvanized steel
- 61701-5150 Guardrail system MGS, type 4, class B wood posts [LNFT] for weathering steel

Note: long-span systems are paid for using the same pay item as roadside rail.

Updates

- **February 2019**
 - New Detail drawing
- **April 2020**
 - Revised note 3, added note 4, minor CADD edits
- **September 2021**
 - Updated for OpenRoads Designer